DOCUMENT RESUME

ED 095 814 HE 005 900

AUTHOR Fife, Jonathan D.
TITLE Computerized Data Sources for Higher Education.
INSTITUTION George Washington Univ., Washington, D.C. ERIC Clearinghouse on Higher Education.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Oct 74
NOTE 4p.; ERIC Higher Education Research Currents October 1974
AVAILABLE FROM Publications Department, American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036 ($.40)

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS Data; *Data Bases; *Higher Education; *Information Centers; *Information Sources; *Information Storage; Statistical Data; Surveys

ABSTRACT

Today, with development of computerized data banks, there is an increased quantity of stored information that has relevance to problems far beyond the scope of the original study for which the data were developed. The purpose of this paper is to highlight some of the major data available and their sources. It is hoped that by describing some of these sources, researchers and policymakers will be encouraged to actively seek out other sources and to develop arrangements to utilize these data for their own special needs. The format of the paper is to indicate specific data sources, to describe the contents of these data, and to identify a contact that may be used to find out more about the use of these data. Items such as ways in which data can be used and cost of the service are not discussed. The sources are divided by the following areas: general survey data; higher education survey data; student survey data; financing data; and nonstatistical computerized data. A 20-item bibliography is included. (Author/PG)

ED 095814

ERIC
HIGHER EDUCATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Research Currents

BEST COPY AVAILABLE

COMPUTERIZED DATA SOURCES FOR HIGHER EDUCATION

by Jonathan D. Fife

Researchers must have access to the most complete data base possible to develop reliable theories. This is no less true for decisionmakers. With the increased emphasis on accountability, development of policy must be based on consideration of all available data. In the past the only way researchers and policymakers could acquire the needed data was to initiate new studies. Today, with development of computerized data banks, there is an increased quantity of stored information that has relevance to problems far beyond the scope of the original study for which the data was developed. In the economic conditions of steady-state funding it is becoming economically imperative for researchers and decisionmakers alike to make use of this data.

The purpose of this paper is to highlight some of the major data available and their sources. It is not possible to be inclusive in the coverage of every data source in a short survey, but it is hoped that by describing some of these sources, researchers and policymakers will be encouraged to actively seek out other sources and to develop arrangements to utilize these data for their own special needs.

The format of the paper will be to indicate in bold type the specific sources of data, to describe the contents of these data, and to identify a contact that may be used to find out more about the use of these data. Because of the unique nature of each user's request, items such as ways in which data can be used and cost of the service will not be discussed. It should be noted that use of the data will depend upon the agreement reached between the user and the source. However, in the case of data that involves individuals or specific institutions, there is generally a caveat by most sources that no data will be released that could violate the privacy of those individuals or institutions.

GENERAL SURVEY DATA

The most general data available and perhaps the data most necessary for long-range planning is nationwide census data. While most people are familiar with general census data, it is not widely known that this information is made available through computer summary tapes and may be purchased by the general public. The most readily available tapes are those prepared by the **Census Bureau** during the course of processing data from the census or various surveys. If these tapes do not contain the information needed, specially designed tapes may be processed.

Since 1969, over 175 organizations—private, public, governmental and academic—have been recognized by the Census Bureau as Summary Tapes Processing Centers. These organizations have indicated to the Bureau a willingness to serve the census data needs of outside users. (For more information concerning the 1970 Census Summary Tapes and addresses of the Summary Tape Processing Centers contact: The Data Access and Use Laboratory, Census Bureau, Washington, D.C. 20233.)

The **Data Use and Access Laboratories** (DUALabs) is an example of a nonprofit corporation whose creation was a result of a need to supplement the delivery system of public data. DUALabs has collected the 1970 census data and other public data files. As a specialist in public data files, the Laboratory helps facilitate access to these files by providing technical guidance in the development of system designs and implementation of specialized programs. If the data files do not provide the information needed, DUALabs will create new programs for manipulating and displaying the contents of the summary data files. (For further information contact: Data Use and Access Laboratories, 1601 North Kent Street, Room 900, Arlington, Virginia 22209).

HIGHER EDUCATION SURVEY DATA

The most general census data of the higher education community is collected by the **National Center for Educational Statistics** (NCES) through their Higher Education General Information Survey (HEGIS). Each year NCES asks all the colleges and universities in the United States to respond to a set of questionnaires concerning their enrollment and makeup. Examples of these questionnaires are: opening fall enrollment in higher education; degrees and

---

Research Currents is prepared by the ERIC Clearinghouse on Higher Education, The George Washington University, Washington, D.C. The material in this publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication, the manuscript was submitted to the American Association for Higher Education for critical review and determination of professional competence. This publication has met such standards. Points of view or opinions, however, do not necessarily represent the official view or opinions of either AAHE or the National Institute of Education.

Copies of Research Currents may be ordered for 40¢ each from the Publications Department, American Association for Higher Education, One Dupont Circle, Suite 780, Washington, D.C. 20036. Payment must accompany all orders under $15.

HE005900

Jonathan D. Fife is associate director of the ERIC Clearinghouse on Higher Education.

BEST COPY AVAILABLE

other formal awards conferred; student enrollment for advanced degrees; institutional characteristics of colleges and universities; salaries and tenure of fulltime instructional faculty; financial statistics for institutions of higher education; and inventory of college and university physical facilities.

In an effort to report more quickly and allow greater flexibility in analyzing the HEGIS data, the NCES has established a time-sharing computer system, EDSTAT. This system permits users of standard keyboard terminals to interrogate the large data base provided through the HEGIS survey. (For further information contact: William Dorfman, National Center for Educational Statistics, 400 Maryland Avenue, S.W., Washington, D.C. 20202.)

Available through the Division of Educational Statistics at the **American Council on Education** are the 11 data files developed by the National Commission on the Financing of Postsecondary Education. Six of these consist of merged or reformated data from recent HEGIS surveys. The remaining five files are based on surveys conducted by various agencies, councils, and commissions, which broaden the data base from one concerned with higher education to one concerned with postsecondary education. Examples of non-HEGIS files are the Vocational Educational Survey, Survey of Postsecondary Schools, Census Data on Local Government Funding, and the Financing of Postsecondary Education Through Federal Programs, 1971-74. Through its Cooperative Institutional Research Program, ACE also has available on computer file the following information: (a) ACE institutional characteristics file (1974 version); (b) institutional survey file of selective policies and practices—a survey response data provided by 669 institutions; (c) 1972-73 ACE Faculty Data File; (d) 1969 ACE-Carnegie Commission Faculty Data File; and (e) 1969 ACE–Carnegie Commission Graduate Student Data File. Copies of these files in whole or in part are available on magnetic tape. (For further information contact: Office of the Director, Division of Education Statistics, American Council on Education, One Dupont Circle, Washington, D.C. 20036.)

The **Institute for Social Research** at the University of Michigan sponsored three studies of interest to the higher education community. In the spring of 1969, 20,008 college and university faculty were surveyed concerning their professional activities and achievements as well as their political opinions and attitudes toward campus unrest. A second study on the political and social values of 14,139 college and university undergraduates was conducted in the winter of 1969-1970. Both of these studies were sponsored in cooperation with the Carnegie Commission on Higher Education. A third study, conducted in cooperation with the Educational Testing Service, dealt with the attitudes toward numerous educational policies of college trustees. (For further information contact: Supervisor, Servicing Section, Survey Research Archives, ICPR, Box 1248, Ann Arbor, Michigan, 48106.)

STUDENT SURVEY DATA

Since 1966, the **American Council on Education** has conducted annual sample Surveys of Freshmen entering the nation's colleges and universities. Samples of respondents were later followed up to provide longitudinal data on student attitudes. While most of this file consists of undergraduate student data, there have been 5- and 10-year followups conducted on students surveyed in 1961 that yield postundergraduate college information. (For further information contact ACE's Division of Educational Statistics or Dr. Alexander W. Astin, Higher Education Laboratory, Graduate School of Education, University of California, Los Angeles, California.)

The two largest student testing organizations, the **American College Testing Program** (ACT) and the Educational Testing Service (ETS), will make available some of the information in their files. Like other organizations, but more important to the testing enterprises, the criteria of confidentiality of information is enforced. ACT has data from three major programs that may be of use to researchers interested in the problems associated with the transition from secondary to postsecondary education. The first program is the ACT Assessment. The Assessment was first offered in 1959, and approximately 850,000 students take the test each year. The second program is the Student Assistance Program. This ACT student-need analysis service was first offered to students during the 1967-68 school year and each year serves about 400,000 students who apply for financial aid to meet their postsecondary expenses. The third area for which data are available is the Career Planning Program (CPP), Grades 12-13. First offered in the fall of 1971, the CPP 12-13 has been administered to about 16,000 students each year since that time. (For further information contact: Director of Research Services, Research and Development Division, American College Testing Program, Iowa City, Iowa 52240.)

As with the American College Testing Program, the **Educational Testing Service** will make data related to undergraduate, graduate, and professional education available to research investigators subject to ETS policies and procedures for control of confidentiality of data, and providing the research plan is acceptable to the appropriate policy group under whose auspices the data were collected. (For further information contact: Mr. John Winterbottom, Educational Testing Service, Princeton, New Jersey 08540.)

The **National Longitudinal Survey** examines the background, education, social-economic status, and occupational decisions of 15,000 individuals from three age groups (14-24 year old males and females; 44-54 year old males; and 30-44 year old females). The purpose of this study is to review the career education and choices of individuals over a long period of time. Several followup surveys have been and will be conducted. (For further information contact: Mrs. Ellen Mumma, National Longitudinal Survey, Ohio State University, Columbus, Ohio.)

Another longitudinal study of student decisionmaking and outcomes has been conducted at the **Center for Research and Development in Higher Education** at the University of California, Berkeley. This 6-year study, entitled *School to College: Opportunity for Postsecondary Education* (SCOPE), investigates how students acquire information about colleges and vocational schools; the nature of parental, school, and community influences upon these decisions, when the various stages of decisionmaking occur, and what students do after high school graduation. This survey included students in California, Illinois, Massachusetts, and North Carolina. (For further information contact: Dr. Dale Tillery, Professor of Education, School of Education, Tolman Hall, University of California, Berkeley, California 94720.)

Project TALENT is a long-range longitudinal study of a representative sample of students assessed with a com-

BEST COPY AVAILABLE

prehensive set of psychological, educational, and personal measures. In 1961, students in grades 9 through 12 were given a battery of tests and inventory. Four followups of the same students by questionnaires have been conducted or are planned. (For further information contact: John G. Claudy, American Institute for Research, P.O. 1113, Palo Alto, California 94302.)

The **National Opinion Research Center** has directed several of its studies toward higher education. One major study surveyed a national sample of 40,000 1961 college graduates. This sample was also followed up in 1962, 1963 and 1964 and in a subsample of 6,000 students in 1968. The purpose of this study was to examine the education, family background, and career success of the graduate. The Center has also conducted other studies of college seniors with emphasis on plans of seniors from black colleges. (For further information contact: Mr. Patrick Bova, National Opinion Research Center, 630 South Ellis Avenue, Chicago, Illinois 60657.)

In 1969, under the joint sponsorship of the Carnegie Commission on Higher Education and The American Council on Education, a **national survey of students and faculty** in a broad sample of colleges and universities was conducted. The objective of this survey was to establish a profile of backgrounds and attitudes of this population toward higher education. (For further information contact: Ilona Einowski, Data Librarian, International Data Library and Reference Service, Survey Research Center, University of California, Berkeley, California 94770.)

FINANCING DATA

Financial studies have enormous importance in today's climate of steady-state funding and scarcity of resources. One of the largest studies investigating the financial conditions of students is the **Students Resource Survey.** This survey, developed by the College Entrance Examination Board, has been used in California, Pennsylvania, Washington, Oregon, and Montana. From this data base, the College Entrance Examination Board has taken a weighted sample of 32,000 students to develop a national profile. For obvious reasons, state identification has been eliminated. Persons interested in the individual state files should contact the State Scholarship and Grants Office of the state surveyed. (For further information on the combined files contact: James Nelson, Vice President for Student Assistance Services, College Entrance Examination Board, 888 Seventh Avenue, New York, New York 10019.)

A more recent study of the impact of state scholarships and grants on student college decisions was conducted at the **Center for the Study of Higher Education** at The Pennsylvania State University. This study, under the co-direction of Larry L. Leslie and Jonathan D. Fife, surveyed the recipients of scholarship and grant programs in Pennsylvania, New York, New Jersey and California. Among the items examined were the students' demographic variables, their educational expenses and financial resources, and their perception of the impact that scholarships and grants had on their choice of school they attended. The data also has implications for the funding of higher education institutions through the indirect delivery system of scholarships and grants. (For further information contact: Larry L. Leslie, Center for the Study of Higher Education, 104 Rackley Building, The Pennsylvania State University, University Park, Pennsylvania 16802.)

The **Center for Research and Development in Higher Education** at the University of California, Berkeley has conducted two studies concerned with state and institutional financing. In 1972, in cooperation with the Education Commission of the States and the State Higher Education Executive Officers Association, Lyman A. Glenny and James R. Kidder (1974) surveyed each statewide coordinating or governing board. Areas covered in this study are state internal revenue, appropriations for all education, appropriations for higher education, and enrollment and unit cost. In July 1974, in cooperation with the Carnegie Council on Policy Studies in Higher Education, a survey of institutions of higher education was conducted to ascertain how they were responding to actual or projected down turns in enrollment and financing. The questionnaire asked for information on changes in operation from 1968 and projected to 1980. Questions covered such areas as resource acquisitions, program and personnel policies, and management practices. (For further information contact: Lyman A. Glenny, Director, Center for Research and Development in Higher Education, 2150 Shattuck Avenue, 5th Floor, University of California at Berkeley, Berkeley, California 94704.)

NONSTATISTICAL COMPUTERIZED DATA

The **National Center for the Study of Collective Bargaining in Higher Education** at the City University of New York's Baruch College has a full-text computer search printout capability for 126 current faculty collective bargaining contracts. (Complete details on the information retrieval system including costs can be obtained by contacting: Mr. John C. Allen, Librarian, National Center for the Study of Collective Bargaining in Higher Education, Baruch College-CUNY, 17 Lexington Avenue, New York, N.Y. 10010.)

Knowing what specific research is in progress in an area has two advantages. First, when developing policies, an institution is able to see if there is current work being conducted in the areas of concern. Second, researchers can eliminate duplication of effort. The **Smithsonian Science Information Exchange** (SSIE) annually collects, indexes, and computerizes 85,000 to 100,000 records of research projects currently in progress. SSIE will provide by a single order or on a continuing basis the following information concerning current research projects: project title, summary of the project, supporting organization, and the address and names of research investigators. (For further information contact: Mrs. Rhoda Goldman, Chief, Behavior Science Branch, Smithsonian Science Information Exchange, 1730 M Street, N.W., Room 300, Washington, D.C. 20036.)

The most comprehensive bibliographic source on education in the world is the **Educational Resources Information Center** (ERIC) Information Network. This network consists of 16 decentralized clearinghouses that cooperate to produce two monthly bibliographic indices, *Research in Education* and *Current Index to Journals in Education.* The information that appears in these indices, such as author, title source, and abstract or annotation, has been placed on computer tapes. Currently, there are more than 80,000 documents in the ERIC files and new titles are being added at a rate of more than 12,000 per year. Like the Census Bureau Data Files, many companies have purchased the ERIC bibliographic files and have established educational resource cen-

BEST COPY AVAILABLE

ters to provide bibliographic services to their constituency. (For a list of these Centers and their fees contact: the ERIC Clearinghouse on Higher Education, One Dupont Circle, Suite 630, Washington, D.C. 20036.)

SUMMARY

There is a large quantity of machine-readable data available in all areas or activities concerned with higher education. The savings to institutions and researchers in using the available data instead of developing new projects is significant. This paper has attempted to highlight some of these sources. For additional sources of data, institutions and researchers are encouraged to contact State Boards of Higher Education and related offices, such as state scholarship offices. Many states are highly sophisticated in their handling of institutional and student data. A wealth of information is waiting to be used.

An organization that has more information concerning the availability of data through the states and details concerning information systems among institutions of higher education is the College and University System Exchange (CAUSE). (For further information contact: Mr. Charles R. Thomas, Executive Director, 737 29th Street, Boulder, Colorado 80303.)

BIBLIOGRAPHY

The American Freshman: National Norms for Fall 1972. ACE Research Reports. Volume 7, Number 5. Washington, D.C.: American Council on Education, Office of Research, 1972. ED 073 735. MF-$0.75; HC-$5.40.

Auster, Ethel and Lawton, Stephen B. *Meeting Ontario's Need for Educational Information: An Evaluation of the SDC/ERIC On-Line Bibliographic Search Service.* Toronto, Ontario: Ontario Institute for Studies in Education Library, 1973. ED 077 531. MF-$0.75; HC-$4.20.

Berger, Alan S. *Longitudinal Studies on the Class of 1961: The Graduate Science Students.* Chicago, Illinois: National Opinion Research Center, 1967. ED 058 825. MF-$0.75; HC-$7.80.

Berkebile, Lonnie A. *Computer Applications to ERIC Clearinghouse Documents Collections: A User and Installation Handbook.* Columbus, Ohio: Ohio State University, Center for Vocational and Technical Education, 1971. ED 056 208. MF-$0.75; HC-$15.00.

Bracken, Paula. *OTIS Basis Index Access System (OBIAS); A System for Retrieval of Information From the ERIC and CIJE Data Bases Utilizing a Direct Access Inverted Index of Descriptors and a Reformatted Direct Access ERIC-CIJE File.* Eugene, Oregon: Oregon Total Information System, 1972. ED 061 979. MF-$0.75; HC-$1.50.

College Plans of High School Seniors: October 1972. Current Population Reports, Series P-20. No. 252. Washington, D.C.: Government Printing Office, 1973. ED 081 388. MF-$0.75; HC-$1.50.

Crawford, Bryce, Jr. *Background, Purpose, and Scope of the GRE Board Research Program.* Princeton, New Jersey: Educational Testing Service, 1972.

Davis, James A. *Career Preferences of Graduate Students.* Chicago, Illinois: National Opinion Research Center, 1964. ED 061 877. MF-$0.75; HC-$3.15.

Directory of Computerized Data Files 1974 and Related Software Available from Federal Agencies. Washington, D.C.: National Technical Information Services, 1974.

Fenske, Robert H. and Scott, Craig S. *A Comparison of Freshmen Who Attend College in Their Home Community and Freshmen Who Migrate to College.* Iowa City, Iowa: American College Testing Program, 1972. ED 067 567. MF-$0.75; HC-$1.50.

Flanagan, John C., *et al. The Project Talent Data Bank: A Handbook.* Palo Alto, California: American Institutes for Research in the Behavioral Sciences, 1972. ED 072 103. MF-$0.75; HC-$5.50.

Glenny, Lyman A. and Kidder, James R. *State Tax Support of Higher Education: Revenue Appropriation Trends and Patterns 1963-1973. Report Number 47.* Denver, Colorado: Education Commission of the States, 1974. ED 090 846. MF-$0.75; HC-$3.15.

Grant, W. Vance and Lind, C. George. *Digest of Educational Statistics, 1973 Edition.* Washington, D.C.: Government Printing Office, 1974. ED 088 240. MF-$0.75; HC-$9.00.

Greeley, Andrew M. *Academic Growth in Catholic Higher Education.* Chicago, Illinois: National Opinion Research Center, 1966. ED 083 952. MF-$0.75; HC-$1.50.

Hemminger, Bruce. *Automated Search of the ERIC Files. Report Resume File and Journal Article File. User's Instruction Manual.* Iowa City, Iowa: Iowa University, Computer Center, 1971. ED 066 209. MF-$0.75; HC-$1.50.

Hooper, Mary Evans. *Earned Degrees Conferred: 1970-71.* Washington, D.C.: Government Printing Office, 1973. ED 032 634. MF-$1.35; HC-$37.80.

Jennings, Jerry T. *Undergraduate Enrollment in Two-Year and Four-Year Colleges: October 1971. Series P-20, Number 236.* Washington, D.C.: Government Printing Office, 1972. ED 067 971. MF-$0.75; HC-$1.85.

Kohen, Andrew I. and Parnes, Herbert S. *Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Male Youth. Volume Three.* Columbus, Ohio: Ohio State University, Center for Human Resource Research, 1970. ED 054 336. MF-$0.75; HC-$7.80.

Poole, Hazel C. *Education Directory 1973-74, Higher Education.* Washington, D.C.: Government Printing Office, 1974. ED 089 601. MF-$1.05; HC-$28.20.

Population Characteristics. School Enrollment in the United States: October 1973 (Advance Report). Current Population Reports. Series P-20, No. 261. Washington, D.C.: Government Printing Office, 1974. ED 088 241. MF-$0.75; HC-$1.50.

Preliminary Estimates of 1972-73 Full-Time Instructional Faculty in Institutions of Higher Education. Bulletin. Advanced Statistics in Management. No. 14, March 1, 1973. Washington, D.C.: Government Printing Office, 1973. ED 087 289. MF-$0.75; HC-$1.50.

Schneider, John H., editor, *et al. Survey of Commercially Available Computer-Readable Bibliographic Data Bases.* Washington, D.C.: American Society for Information Science, Special Interest Group for Selective Dissemination of Information, 1973. ED 072 811. MF-$0.75; HC-Not Available from EDRS.

Spaeth, Joe L. *Undergraduate Origins and Success in Graduate School.* Chicago, Illinois: National Opinion Research Center, 1966. ED 059 690. MF-$0.75; HC-$1.50.

Tillery, Dale, *et al. SCOPE Four-State Profile, Grade Twelve 1966, California, Illinois, Massachusetts, North Carolina.* Berkeley, California: California University, Center for Research and Development in Education, 1966. ED 016 998. MF-$0.75; HC-$4.20.

Trow, Martin, *et al. Technical Report: National Surveys of Higher Education.* Berkeley, California: Carnegie Commission on Higher Education, 1971.

Tuckman, Bruce W. *A Study Curriculums for Occupational Preparation and Education (Scope Program: Phase I). A Systems Model for Instructional Design and Management. Incidental Report Number 3.* New Brunswick, New Jersey: Rutgers, The State University, 1970. ED 045 808. MF-$0.75; HC-$1.50.

Wade, George H. *Fall Enrollment in Higher Education 1971.* Washington, D.C.: Government Printing Office, 1973. ED 082 685. MF-$1.05; HC-$31.80.

Warkov, Seymour, *et al. Graduate Student Finances, 1963. A Survey of Thirty-Seven Fields of Study.* Chicago, Illinois: National Opinion Research Center, 1965. ED 058 824. MF-$0.75; HC-$21.00.

Zeller, Frederick A., *et al. Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Male Youth. Volume Two.* Columbus, Ohio: Ohio State University, Center for Human Resource Research, 1970. ED 047 104. MF-$0.75; HC-$7.80.

To order documents in the bibliography identified by an ED number, write to ERIC Document Reproduction Service (EDRS), Computer Microfilm International Corporation, P.O. Box 190, Arlington, Va. 22210. Documents with HE numbers are presently being processed by EDRS and will be assigned ED numbers upon publication in *Research in Education* (RIE). In ordering, ED numbers must be specified. MF indicates microfiche and HC denotes hard copy; payment must accompany orders of less than $10.00; and all orders must be in writing.